

A NEW SPECIES OF *APODEMIA* FROM TEXAS (RIODINIDAE)

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On August 3, 1962 while examining some *Agave scabra* plants in the Chisos Mountains, Texas, looking for trap doors of *Agathymus chisosensis* (Freeman), my attention was drawn to a small Metal-mark that settled on the ground near my feet. After catching the specimen I quickly noted that it was unlike any that I had previously seen; thus, the rest of the afternoon was spent in looking for more specimens. I caught two more after about four hours' careful collecting. Later when I had taken the time to examine specimens of all the other North American *Apodemia* I decided that these three specimens were examples of an undescribed species of that genus, the description of which follows.

*APODEMIA CHISOSENSIS* Freeman, NEW SPECIES

MALE. Upper side: Primaries light coppery brown, being darker along costal margin, outer margin, and near base; seven black spots along outer margin; five black dashes present in submarginal area; two subapical white spots, the first merely a short line, the second broadly triangular; an irregular band of black spots in postmedian area running from just inside subapical spots to nearly center of inner margin; a black bar at end of cell with four small dots between this and base; wing shape normal and not strongly produced at apex; fringes black with three white spots present, one at apex, one near middle of outer margin, and one near tornus. Secondaries light coppery brown, being slightly darker along outer and anal margins; seven black spots along outer margin; eight black dashes forming an even curve throughout limbal area; five broad black dashes in discal area forming a straight line from inside outer angle to about midway of anal margin; two black bars near costa; a black bar at end of cell, with four black spots near base; fringes black with a white streak at outer angle, one white spot midway of outer margin, and another near anal angle.

Under side: Primaries similar to above except lighter and the apical area sordid white. Secondaries snow white with all spots reappearing very distinctly; three orange spots between marginal spots and submarginal dashes, forming an even curve in limbal area.

Expanse 27 mm.

FEMALE. Upper side: Very similar to ♂ except for slightly broader wings and lighter ground color. The most distinguishing difference is macular band, which originates beneath subapical spots and goes to inner margin, composed of six sordid white, broad, spots. Secondaries are like ♂ except ground color is slightly lighter; all spots the same.

Under side: Primaries same as ♂ except ground color lighter; secondaries same as ♂ except slightly lighter.

Expanse 32 mm.

Thorax above dark grayish brown, beneath snow white; abdomen of same general color as thorax, with the segments marked by a white line; legs sordid white; palpus white; antenna black, minutely ringed with white.

The ♂ genitalia are illustrated on the plate.

HOLOTYPE, male, Chisos Mountains, elevation 5400 ft., Texas, 3 August 1962 (leg. H. A. Freeman); ALLOTYPE, female, same location, collector, and date. One ♂ paratype with the same data. The Holotype



Left column: *Apodemia nais* (♂ & ♀; White Mts., Ariz.; 3-4 July 1951).  
 Right column: *Apodemia chisosensis* (Holotype ♂ & Allotype ♀; Chisos Mts.,  
 Texas; 3 Aug. 1962). Top row ♂♂, upperside; 2nd row, ♂♂ underside; 3rd row,  
 ♀♀ upperside; 4th row, ♀♀ underside; bottom row, ♂♂ genitalia.

and Allotype are in the collection of H. A. Freeman. The paratype has been placed in the Stallings and Turner collection at Caldwell, Kansas.

The nearest relative of the new species is *Apodemia nais* Edwards; however, there are several ways that the two species can readily be separated. The genitalia are different, as the illustrations on the plate show. The ground color of the secondaries beneath is a quick way to separate the two species; since *chisosensis* is snow-white in both fresh and worn specimens, it can be told at once from *nais*, as that species has the ground color of the secondaries on the under surface soft gray with some conspicuous patches of pale copper around the end of the cell, and there is also a distinct coppery orange band between the spots and dashes in the limbal area. The most distinguishing difference between the two species is the alignment of spots in the discal area of the secondaries, for in *chisosensis* there are five well-defined, broad dashes forming a straight line, while in *nais* these spots are more rounded and the middle one is displaced inward towards the base. In *nais* the fringes are also checkered throughout, while in *chisosensis* there are only three white spots on each wing. The apex of *nais* is more pointed in the ♂♂ than is that area in *chisosensis*.

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